

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) Method for dynamic adaptation of the support of the body of a person seated on a vehicle seat, the method comprising:

predicting and setting, by an adaptation system which is integrated in the vehicle seat, ~~a measure of a current~~ desired adaptation at a point on a curved road before the vehicle arrives at the point taking into account current vehicle velocity from stored road data ~~over current road course, onto which data current vehicle data are projected;~~

actuating the adaptation system taking into account the adaptation time inherent in the system, whereby when an event requiring the adaptation occurs, at least one adaptation presetting adapted thereto is achieved.

2. (previously presented) Method according to Claim 1, wherein a correction of the adaptation presetting is carried out with currently measured vehicle data during the event requiring the adaptation.

3. (previously presented) Method according to Claim 1, wherein the current road course is obtained from a digital road map which contains route data relating to a traffic network and attribute data assigned to the route data, in that data of seat adaptations which have been carried out is stored in an assignment to route data as adaptation attributes in the road map, and in that, when the route section is traveled along again, the adaptation system is actuated using the adaptation attributes.

4. (previously presented) Method according to Claim 3, wherein a velocity-corrected adaptation measure is stored as adaptation attribute.

5. (previously presented) Method according to Claim 1, wherein in order to determine the adaptation measure required when a bend is traveled through, the expected lateral acceleration which acts on the vehicle seat is predicted and the degree of lateral support is thus calculated.

6. (previously presented) Method according to Claim 2, wherein when the bend is being traveled through the lateral acceleration which really occurs is measured and the degree of lateral support is thus corrected.

7. (previously presented) Method according to Claim 3, wherein the predicted and/or measured lateral acceleration is stored as adaptation attribute.

8. (currently amended) Method according to Claim 5, wherein when the maximum value of the lateral acceleration which is derived from a predicted limiting velocity for ~~travelling~~ traveling through a bend is exceeded by the predicted lateral acceleration a warning signal for the driver is issued.

9. (previously presented) Method according to Claim 8, wherein the warning signal is fed to the driver in a haptic way by suddenly increasing the lateral support on the side of the seat which is on the outside in the direction of curvature of the bend.

10. (previously presented) Vehicle seat comprising:

a seat part,

a backrest,

an adaptation system for adapting body support of a person seated on the vehicle seat, the adaptation system including air cushions which are

integrated at least in side bulges of the seat part and/or backrest, and a compressed air regulating device for adjusting the air pressure in the air cushions,

a control unit which has a control computer and is connected to the compressed air regulating device and generates, from a lateral acceleration value fed to the control unit, a control signal for setting a filling pressure by the pressure regulating device,

a sensor connected to the control unit for measuring the vehicle velocity,

a prediction device for predicting the lateral acceleration expected in a current curve, and

a prediction filter which applies the predicted lateral acceleration to the control unit taking into account the filling pressure-dependent filling times of the adaptation system.

11. (previously presented) Vehicle seat according to Claim 10, wherein the prediction device has a digital road map which contains route data relating to a traffic network and attribute data assigned to the route data, in that time points of a change in filling pressure by the compressed air regulating device can be stored in a relationship with the vehicle velocity and the route data as adaptation attributes in the road map, and in that, when the route section is traveled along again, the prediction filter adapts the adaptation attributes to the current driving velocity and uses it to specify the time when the predicted lateral acceleration is applied to the control unit.

12. (previously presented) Vehicle seat according to Claim 10, wherein the prediction device has a digital road map which contains route data

relating to a traffic network and attribute data assigned to the route data, in that filling pressures which are implemented by the compressed air regulating device can be stored, in a velocity-corrected fashion, in a relationship with the route data as adaptation attributes in the road map, and in that, when the route section is traveled along again, the prediction filter directly applies the adaptation attributes to the control computer as set point pressure values.

13. (previously presented) Vehicle seat according to Claim 10, wherein the prediction device predicts a maximum value of the lateral acceleration from a predicted limiting velocity with which a current bend can be traveled through, and in that when the maximum value is exceeded by the predicted lateral acceleration, said prediction device applies a maximum pressure value as a set point pressure value for setting the filling pressure in the filling cushions which are arranged on the side of the vehicle seat located on the outside in the direction of curvature of the bend.

14. (currently amended) A method for dynamic adaptation of vehicle seat support, the method comprising:

predicting a desired seat support ~~in~~ at a point on a curved road section on the basis of vehicle velocity from stored road data for a road which the vehicle is traveling on before the vehicle arrives at the point on the curved road, and

actuating an adaptation system to provide a seat support based on the predicted desired seat support when the vehicle arrives at the point on the curved road section, taking into account delays in the adaptation system.

15. (previously presented) The method according to Claim 14, wherein predicting a desired seat support includes:

predicting a lateral acceleration in the curved road section on the basis of vehicle velocity from the stored road data; and

predicting the desired seat support based on the predicted lateral acceleration.

16. (previously presented) The method according to Claim 15, wherein when a maximum value of the lateral acceleration for the curved road section is exceeded by the predicted lateral acceleration a warning signal for the driver is issued.

17. (currently amended) The method according to Claim 15 further comprising providing the seat support partially based on lateral acceleration measured when the vehicle is ~~travelling~~ traveling in the curved road section.

18. (currently amended) The method according to Claim 14 further comprising storing data with the predicted desired seat support as a function of vehicle velocity and road location along a road the vehicle is ~~travelling~~ traveling on so that the stored data can be used in the future to predict desired seat support on the basis of vehicle speed and location on the road when the vehicle travels again on the same road.

19. (currently amended) The method according to Claim 14 further comprising storing data with pressure, which is supplied to seat cushions to provide seat support, as a function of vehicle velocity and road location along a road the vehicle is ~~travelling~~ traveling on so that the stored data can be used in the future to predict seat cushion pressure on the basis of vehicle speed and location on the road when the vehicle travels again on the same road.

20. (currently amended) The method according to Claim 14 further comprising storing data with lateral acceleration as a function of vehicle velocity

and road location along a road the vehicle is ~~travelling~~ traveling on so that the stored data can be used in the future to predict lateral on the basis of vehicle speed and location on the road when the vehicle travels again on the same road.

21. (previously presented) A vehicle seat system comprising:

a vehicle seat;

an adaptation system for adapting the vehicle seat for body support,
the adaptation system including,

air cushions which are integrated in the vehicle seat, and

a compressed air regulating device for adjusting air pressure in the
air cushions;

a control unit including a control computer, the control unit being
connected to the compressed air regulating device for setting air cushion
pressure;

a vehicle speed sensor, the vehicle speed sensor being connected to
the control unit;

a prediction device that predicts lateral acceleration in a curved
road section before the vehicle arrives at the curved road section; and

a prediction filter that sends the predicted lateral acceleration to
the control unit to set air cushion pressure in accordance with a desired seat
setting for the predicted lateral acceleration when the vehicle arrives at the
curved road section, taking into account a delay of the adaptation system .

22. (currently amended) The vehicle seat system according to
Claim 21, wherein the prediction device is configured to store data with air

cushion pressure as a function of vehicle velocity and road location along a road the vehicle is ~~travelling~~ traveling on so that the stored data can be used in the future to predict cushion pressure on the basis of vehicle speed and location on the road when the vehicle travels again on the same road.

23. (currently amended) The vehicle seat system according to Claim 21, wherein the prediction device is configured to store data with lateral acceleration as a function of vehicle velocity and road location along a road the vehicle is ~~travelling~~ traveling on so that the stored data can be used in the future to predict lateral acceleration on the basis of vehicle speed and location on the road when the vehicle travels again on the same road.